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ARTICLE: Coming Attractions: Opportunities and Challenges in Thwarting Global Movie Piracy

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BIO:

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SUMMARY:

... From a technological standpoint, the film industry rushed to develop digital rights management (DRM) tools that seek to deter illegal copying, but often end up being more successful in frustrating average consumers who wish to simply view or make backup copies of digital media they have lawfully purchased for use on a wide range of home technology devices. ... Internet piracy relates to the hacking of vulnerable Web sites to steal movies or defeating DRM tools on authentic films and then posting the materials on the Web for illegal file sharing. ... Despite claims of devastating piracy losses, the MPAA and NATO seem to have had little success from a security perspective in deterring illegal camcorder conduct in the movie theater. ... As consumer demand for content continues to evolve and as consumer expectations for on-demand viewing increase, the development of creative and legal access to films will help benefit both the movie industry and consumers and deter movie piracy. ... Although the licensing mandates of CSS only bind DVD device makers, the film industry prefers to retain region locks purely for commercial and anticompetitive reasons, such as segmenting markets for film advertising and distribution purposes, protecting theatrical revenues as movies are released over time globally and keeping out parallel imports of DVDs. ... **CONCLUSION** It is obvious that the enactment of tougher criminal laws and the tightening of DRM controls have done little to blunt movie piracy worldwide and have pushed many honest consumers to seek out pirated films and DRM circumvention tools.

TEXT:

[*331] I. INTRODUCTION

Disaster films have long been a staple of the movie industry, reaping huge revenues by scaring moviegoers with the familiar formula of catastrophes threatening to destroy the world as we know it. n1 Theater patrons have been thrilled by a growing array of manmade disasters including burning skyscrapers, n2 mad scientist cloning, n3 seismic calamities, n4 flying cows and gas tankers, n5 errant asteroids, n6 invading aliens, n7 and instantaneous global warming. n8 In recent years, the movie industry seems to be producing yet another disaster film--*Global Movie Piracy*, starring menacing theater cammers, devious [*332] downloaders, and corrupt optical disc manufacturers. The Motion Picture Association of America (MPAA) claims that the industry lost \$ 18 billion in potential revenues in 2005 alone due to global film piracy, n9 resulting in approximately 141,030 job losses and \$ 837 million in lost U.S. tax revenues. n10 The industry asserts that international movie piracy endangers its teetering business model in which only one in ten films recovers its initial investments. n11

Since Hollywood finds comfort in following a safe formula, the MPAA along with its global arm, the Motion Picture Association (MPA), have shadowed the actions of the Recording Industry Association of America (RIAA) in its battle against music piracy, using courtroom, legislative, and technological strategies. The film industry has sued movie consumers and open content sites, like YouTube, for copyright violations n12 and has won [*333] legal actions against companies offering file-sharing n13 and duplication software for DVDs. n14 The industry has successfully lobbied Congress and the legislative bodies of foreign nations to deepen the breadth and severity of criminal copyright infringement. n15 It has prodded international law enforcement to utilize public resources to investigate and prosecute infringers to vindicate their private economic rights. n16 Furthermore, these film organizations have also spearheaded global educational programs to inculcate in [*334] the public consciousness the importance of respecting intellectual property rights and the civil and criminal penalties for failing to do so. n17

From a technological standpoint, the film industry rushed to develop digital rights management (DRM) tools that seek to deter illegal copying, n18 but often end up being more successful in frustrating average consumers who wish to simply view or make backup copies of digital media they have lawfully purchased for use on a wide range of home technology devices. n19 While legitimate purchasers are confounded by DRM protections, pirates have consistently hacked these systems and made circumvention tools, such as DeCSS n20 and mod chips, n21 readily available to dishonest users. Many commentators have questioned continuing efforts to shore up DRM tools in light of the easy access of circumvention tools and the failure of DRM to halt movie piracy. n22

Some experts have criticized these approaches as unfairly penalizing honest consumer behavior n23 and improperly utilizing limited public law [*335] enforcement resources to enforce private economic rights. n24 Furthermore, First Amendment advocates are concerned that the further criminalization of copyright violations places a chilling effect on free speech and continues to dismantle fair use principles in this march toward zero tolerance against movie copyright violations. n25 Additionally, some industry experts have challenged the validity of the film industry's piracy statistics as to the claimed disaster of film revenue losses, n26 particularly in light of 2006's highest box office revenues in global movie industry history (\$ 28.5 billion) n27 and the continuing profitability of DVD sales. n28

While the film industry has focused almost exclusively on the doomsday scenario of movie piracy, other movie executives are trying to learn some lessons from the motivations for piracy in order to improve their economic prospects. Speaking at the 2006 MIPCOM, the global audio-visual content industry conference, Anne Sweeney, president of Disney-ABC [*336] jolted the audience with her assertion that "[p]iracy is a business model . . . [i]t exists to serve a need in the market . . . [a]nd piracy competes for consumers, the same way we do: through quality, price, and availability." n29 She added that the industry does not "like the model but we realize it's competitive enough to make it a major competitor going forward." n30

Ms. Sweeney hit upon the key error of many others in her industry-the failure to recognize that piracy serves customer interests in ways that the industry has long ignored. In addition, the ability of pirates to consistently defeat technological efforts to protect copyrighted materials suggests that the time has come to try to compete, rather than defeat, piracy's business model. n31 There are numerous self-help remedies that the movie business could, but has not chosen to, implement that would reduce movie piracy without further aggravating honest consumers or draining precious law enforcement resources.

This article considers the main forms of global movie piracy and discusses some of the typical players and distribution channels for pirated films. In response to these forms of piracy, the industry's efforts to lobby for tougher criminal sanctions and greater protections for DRM in the United States and worldwide are considered as well as their negative impact on consumer fair use rights. The failure of national laws and DRM to stymie movie piracy illustrates the need for the industry to consider new strategies that involve competing with the "business model" of piracy. n32 In view of the key lessons learned from an analysis of piracy, this article makes recommendations on self-help remedies that the film industry can implement to reshape its own business model in a manner that deters global movie piracy without alienating its customer base or straining already limited international law enforcement resources.

[*337] II. MAIN FORMS OF MOVIE PIRACY

Movie piracy involves instances of either illegal copying or bootleg materials. Illegal copying relates to illicit copies made of an authentic DVD, VHS tape, or Video CD, either legally or illegally obtained. Individuals might make copies of a movie they purchased or received illegally from third-party copies of authentic goods. For example, a film critic providing copies of an authentic film to friends and family before its wide public release would be an example of illegal copying. Typically, bootlegging deals with illicit recording of a live performance in the theater from which illegal cop-

ies are subsequently made and distributed. n33 Bootlegging in the film business is primarily due to individuals secretly using camcorders in a theater who pass on the video to third parties for illegal duplication and quick distribution.

There are three main forms of movie piracy: (1) camcorder piracy, (2) optical disc piracy, and (3) Internet piracy. Each form of piracy provides a channel for illegal copying and distribution of films, often hours after the film has premiered and, in some instances, before the film is released in theaters worldwide. n34 Camcorder piracy concerns the illegal recording of a movie at its release by a theater patron or cinema employee. n35 This practice is the main source of illicit film copies, about ninety percent of all pirated films, which end up in the illegal stream of goods on the Internet and in hard goods piracy in the real world. n36 However, the visual quality of camcorder films is certainly less than authentic copies or copies reproduced in digital formats.

Optical disc piracy concerns bricks-and-mortar factories typically operated by organized crime gangs, often readily found in Russia and Asia. n37

[*338] These optical disc factories can generate hundreds of thousands of counterfeit discs from illegal and/or bootleg copies of movies in a range of digital formats for quick distribution and sale in the real world. n38 It is estimated that Russian optical disc factories generate anywhere from fifty to eighty million counterfeit DVDs annually for global exports. n39 Unlike camcorder piracy, the illegal copies made in these factories tend to be of high quality because they utilize the same technology and equipment used in legitimate replication factories. n40 In turn, the revenues from these counterfeit film sales may help fund the gang's other criminal activities and can seriously deteriorate the legitimate market for these movies. n41 In 2005 global law enforcement in collaboration with the MPAA confiscated more than eighty-one million illegal optical discs. n42 In April 2007 the United States filed complaints against China with the World Trade Organization (WTO) for its failure to crack down on piracy of copyrighted goods, especially the production and sales of counterfeit DVDs. n43

Internet piracy relates to the hacking of vulnerable Web sites to steal movies or defeating DRM tools on authentic films and then posting the materials on the Web for illegal file sharing. n44 Secretive and loosely affiliated groups known as "warez traders" or "warez release groups" specialize in hacking antitheft protections on films and then transmit their pirated [*339] films or "moviez" over the Internet. n45 They may view and exchange their illegal moviez with other top warez groups or simply collect them to try to impress others with their technical abilities and the breadth of their warez. n46 Warez traders are seldom motivated by profit, n47 but their hacked goods often end up on other Web sites with more entrepreneurial and criminal aims. n48

Although one hears a great deal about illegal file sharing, it is the source of less than ten percent of pirated copies of first-release movies. n49 In addition, hard goods piracy of films sold both online (e.g., auction sites) and in the bricks-and-mortar world (e.g., street vendors or flea markets) is estimated to cost over \$ 2.9 billion globally compared to Internet piracy from illegal downloading, projected to be \$ 1.85 billion in losses. n50 Similarly, in the United States, hard goods movie piracy outpaces illegal file sharing of films with about \$ 864 million in predicted losses compared to \$ 447 million for illegal file sharing. n51 Industry analysts have also indicated that movie downloaders are the industry's core customers, and downloading has little impact on their attendance at movie theaters; forty-three percent attend the movies at the same rate as in the past and forty-one percent attend more often. n52 In fact, downloaders tend to be the movie industry's biggest fans. These consumers enjoy watching the same movies, multiple times, in the theater and on a wide range of home and mobile devices. n53

[*340] Regardless of the method of piracy, each form needs someone or some group to supply with new movies to feed the production and distribution chains. Although hacker group hierarchies may vary, certain roles have been identified in various investigations, starting with "brokers" who recruit other individuals or groups to become "suppliers" who undertake the illicit copying activities. n54 "Cammers" are the main suppliers of bootleg films, rushing to the cinema with their camcorders to illegally record a film at its opening. Cammers may be secretly filming the movie as a theater patron, but may also work in concert with theater employees, gaining access to the projectionist booth to record movies while avoiding detection. n55 Cammers are key suppliers, but other industry insiders, such as movie critics and theater projectionists, are often involved in providing illegal copies of legitimate films to third parties. n56

"Couriers" gather the ill-gotten video from their suppliers delivering their bootleg or illegally copied products to "replicators" who make hard goods copies for distribution, typically at optical disc factories. Couriers may also hand over illegal copies with DRM controls to release groups whose "crackers" will break the DRM controls. The cracker will then test the movie, stripped of its DRM protections, to make sure it still plays correctly. The cracker then breaks

the newly cracked film into smaller file packets and sends it to clusters of high-speed and high-storage "top sites" for distribution over the Internet for illicit file sharing or replication at remote optical disc factories. n57

"Facilitators," such as peer-to-peer movie sites, then provide the tools, including search engines, directories, and peer-to-peer software, to [*341] aid file sharers in locating and exchanging materials. Once on the Internet, the film can be illegally uploaded and downloaded by millions of individuals on their computers across the globe, sometimes within hours of its public release. n58

III. INDUSTRY LOBBYING FOR TOUGHER CRIMINAL SANCTIONS

The movie industry, along with others in digital media and entertainment industries, lobbied Congress to broaden the reach of copyright laws and to toughen the civil and criminal penalties for piracy. n59 Although the civil courts may be the appropriate venue for copyright violations, n60 three major revisions to U.S. copyright laws made it easier for the film industry to push for more criminal investigations and prosecutions of movie piracy. First, the No Electronic Theft Act of 1997 (NET Act) specifically targeted warez release groups, n61 expanding the definition of economic gain to include benefits derived from file sharing of pirated goods. n62 In the file-sharing environment, the Act amended the criminal copyright laws [*342] to permit prosecutions in cases in which there is no profit or economic motives. n63

Subsequently, Congress enacted the Digital Millennium Copyright Act (DMCA) in 1998, which in part made it a felony to try to circumvent or to manufacture, offer, or seek to provide devices that would circumvent DRM tools on copyrighted works. n64 Although the provisions of the DMCA specifically exempt fair use n65 from its reach, some DMCA critics contend that fair use has suffered significantly under the Act in practice. n66 In the Copyright Office's triennial review of the law, persistent [*343] complaints about fair use encroachments and harms to consumer rights have been routinely rejected as "mere inconveniences" with no DRM exemptions being granted under the law in 2000 and 2003, and only six very limited ones in 2006. n67

Prior to the passage of the DMCA, the U.S. had already begun pressuring other nations to enact anticircumvention provisions in their national laws through international trade agreements n68 as well as being an early champion of the WIPO Internet treaties. n69 These treaties, the WIPO Copyright Treaty (WCT) n70 and WIPO Performances and Phonogram Treaty (WPPT) n71 call on member nations to provide adequate protection for DRM measures and effective legal remedies to enforce them. n72

In the wake of the WIPO Internet treaties and the enactment of the DMCA, the European Union (EU) subsequently adopted the controversial Copyright Directive (EUCD) in 2001. n73 The EUCD requires member nations to offer sufficient legal protections of DRM and to enforce appropriate [*344] anticircumvention remedies n74 Since its passage, EU member nations have struggled with harmonizing national consumer protection laws and the Directive's DRM mandates. Conforming national laws have been challenged in court and criticized as contradictory to established EU consumer rights and notions of fair use. n75

Under the DRM umbrella, the movie industry tossed in a number of add-ons, such as regional coding or locks on DVDs, barriers to the creation of backup copies of DVDs for personal use, and tethering DVDs to specific proprietary platforms. These claimed DRM measures have no relationship to protecting legitimate copyright concerns and unfairly limit fair use options for consumers worldwide. n76 Few consumers are aware of these hidden DRM limitations because there are no clear disclosure obligations placed on industry. n77

[*345] Most recently in 2005, Congress enacted the Family Entertainment and Copyright Act (FECA). n78 The Act made illegal camcording in the movie theater a felony under federal criminal law. n79 Further, FECA enhanced the penalties for those who post online prerelease copies of copyrighted materials, such as movies. n80 Besides federal statutes in the United States, most states have long had criminal statutes against the use of recording devices in movie theaters. n81

With these key changes to copyright law, the movie industry has pressed for more criminal investigations and prosecutions of movie piracy, both domestically and globally. n82 With the prodding of the MPAA, U.S. federal and international law enforcement agencies have collaborated in copyright infringement investigations and prosecutions, involving simultaneous search warrants in more than a dozen nations under various law enforcement operations in an effort to deter film piracy. n83 The MPAA reported that, in 2005, global law enforcement undertook 43,000 raids, resulting in 31,000 criminal cases, and the seizure of millions of illegal discs. n84 Pressure has been put on other nations to step up their prosecutions of movie piracy. For example, one of the recent U.S. filings with the WTO contended that China was not doing enough to prosecute movie [*346] piracy within its borders. n85 Under the shadow of the pend-

ing WTO complaints, China announced that the possession of five hundred or more pirated CDs or DVDs would now be sufficient to permit prosecution, compared to the previous threshold of one thousand illegal disks. n86

Yet law enforcement seldom receives plaudits or support from the public or their elected government representatives for their efforts. n87 Recently, after much MPA prodding, Swedish law enforcement raided the offices of Pirate Bay, a well-known movie file-sharing site. After the raid, over 1,000 Swedish citizens participated in rallies in favor of Pirate Bay in two major cities, Stockholm and Gothenburg, with mainstream politicians decrying the heavy-handed tactics. n88 Similarly, surveys in the United States show that most Americans do not view movie piracy as a major societal issue that deserves serious criminal sanctions or as worthy of a high priority within the law enforcement agenda. n89

In addition, many other nations question the ethics and legal bases for current copyright laws. n90 Other cultures may view the enforcement of copyright as merely another chance for rich developed nations to force their values on poor developing countries n91 and to preserve the assets of wealthy elites. n92 [*347] In the DVD distribution chain, if poorer nations even receive a film, they are the last countries to obtain the goods and only "after all possible revenue has been wrung from the rich countries." n93

Further, certain cultures may simply eschew the Western legalistic approach to copyright and will focus on the morality of their conduct based upon an assessment of its impact on their social and familial networks. n94 In one survey, Singaporean students were significantly more aware of the legal mandates of copyright than their North American counterparts, but viewed the ethics of their copying in a positive light as something beneficial to their family, friends, and themselves. n95 Indifference to intellectual property rights may also arise from growing consumer expectations about receiving information and entertainment on demand and customized to their tastes and interests. n96

However, some commentators have questioned the use of finite law enforcement resources to vindicate private economic interests, especially in light of more serious criminal activities that threaten public safety, such as drug trafficking and terrorism. n97 Experts suggest that the highly profitable entertainment industry should focus on civil lawsuits using their own funds, rather than drawing on public resources, to vindicate their copyright interests. n98 Legal commentators have also noted that most people want criminal laws to attach truly serious risks to public safety and that criminalizing copyright is not appropriate due to the absence of the potential for substantial physical harm to others. n99 Reflecting public sentiment, Professor Joel Feinberg contends that copyright violations should [*348] only be subject to criminal sanctions if there are no other alternatives to curbing such conduct. n100

IV. LEARNING KEY LESSONS FROM PIRACY'S "BUSINESS MODEL" -- SELF-HELP REMEDIES

Since the film industry claims that movie piracy is rampant, national laws and DRM technologies apparently have been largely ineffective. Perhaps the time has come for the industry to consider different approaches in their battle against movie piracy. If the industry listened to Ms. Sweeney and considered the "business model" of piracy, it might easily find several self-help remedies that would improve customer satisfaction and deter piracy without draining public law enforcement resources. By looking at piracy as a business model, the movie industry can analyze the strategies that have made piracy a global success and fashion new and innovative efforts to compete with this potent global force.

A. Pirates Have No Trouble Finding Reliable Suppliers of New or Prerelease Films

Like any successful business model, pirates must be able to rely on dependable suppliers of films who can deliver illicit or bootleg copies within hours of movie premieres and, in some cases, before general film release. Regardless of the criminal provisions of FECA or state laws against camming and online postings of prerelease films, pirates appear to have little difficulty finding willing suppliers, primarily working within the motion picture and theater industries. Because most films premiere in the United States, this figure indicates that most piracy occurs on the business premises of U.S. movie theaters either under the noses of or in collaboration with theater employees and other industry insiders. The MPAA and the National Association of Theater Owners (NATO) must take more proactive steps to cut off or decrease the supply of copyrighted materials, rather than drawing upon strained public law enforcement resources to prevent movie piracy.

Despite claims of devastating piracy losses, the MPAA and NATO seem to have had little success from a security perspective in deterring illegal camcorder conduct in the movie theater. The MPAA states that it is "spending substantial amounts of money to upgrade movie print security [*349] across the country," including bag searches at selected pre-screening events, the use of night-vision monoculars, and warning signs about illegal camcording. n101 Yet most moviegoers do not have to contend with any additional security measures at the theater, and if anything, there is less

staff presence in the viewing audience than in the old days of ushers patrolling with flashlights. With cammers being the overwhelming source for pirated films, the industry's security measures are clearly inadequate. If the MPAA and NATO were more vigilant about security inside U.S. cinemas, there would be less worry about piracy losses outside the multiplex.

However, in a competitive entertainment market, it seems unlikely that theater owners would want to further inconvenience theater patrons with additional security measures that may turn moviegoers off to the theater experience. n102 Also, theater owners may not be willing to invest more money on security when ninety percent of the ticket revenues for opening weeks go to the movie studios while selling concessions account for forty-six percent of all cinema profits. n103 Ian M. Judge, the director of operations at F.E.I. theaters, indicated that in today's movie world a cinema operator may not consider itself to be "a theater, but a restaurant that shows movies" which may result in less concern about film piracy. n104

In contrast to their willingness to use limited public law enforcement resources to fight piracy, the MPAA and NATO have focused largely on low-or no-cost tactics to prevent camming when the expenses come out of their own funds. n105 A review of the MPAA and NATO-sponsored guide, *Best Practices to Prevent Film Theft*, illustrates a generally superficial low-budget approach, including suggestions to theater employees to "look for [*350] glowing lights" or "look for coats in summer" and posting signs that camcording is not allowed in the theater. n106 In addition, the guide suggests such basic film print security behavior as locking or alarming projection booth doors, not handing film prints over to unauthorized persons, making regular entries into print movement logs, and being vigilant about friends of staff in the projection booth. n107 Clearly mindful of expenses, the guide mildly suggests that cinema owners "consider hiring private security" primarily on major opening weekends for blockbuster films. n108

The movie industry also proclaims that NATO employees "are the first line of defense against this growing criminal enterprise." n109 Clearly, this defense is seriously flawed because cammers continue to be successful as consistent providers of illicit copies of first-run films to pirates. At present, the MPAA and NATO offer very weak training and incentive programs for theater employees to watch for and stop camming activities within the cinema. In 2005 the MPAA created fightfilmtheft.org, a rudimentary Web site that offers a brief online tutorial and quiz (with \$ 300.00 drawing) for theater employees. n110

In addition, their "Take Action" Reward Program offers employees the paltry sum of \$ 500.00 under very limited circumstances for preventing camming activities in the cinema. n111 The theater employee must meet five initial requirements to be eligible for the reward: (1) detect the individual using a camcorder in the cinema, (2) immediately contact law enforcement, (3) halt the recording before the film reaches its end, (4) complete a police report, and (5) contact the MPAA within twenty-four hours of the occurrence. n112 The theater employee is also warned not to endanger theater patrons when trying to stop camming, n113 but it is unclear how the [*351] employee is supposed to recognize or prevent this potential threat. If they meet these mandates, they must then complete an application for the reward which can still be denied at the sole discretion of the MPAA and NATO. n114

Even though there are nearly 38,000 movie screens in the United States n115 with multiple showings every day of films, the reward program has only distributed rewards to eighty-four recipients since May 2004. n116 Considering the claimed losses due to camming, the small reward and associated limitations on receiving it are unlikely to encourage employees to make the extra, and perhaps dangerous, effort to stop this illegal conduct. These organizations need to undertake more proactive training of their employees, emphasizing the importance of protecting copyrighted films to sustain company revenues and employee job security. Theaters and film companies should also better supervise employees to ensure compliance with their legal and fiduciary duties regarding copyrighted movies. By improving theater security, strengthening employee training and supervision, and providing better reward incentives, the industry could help prevent camming in U.S. theaters and root out the main source of supply of pirated films.

Besides camming, pirates also often find helpful suppliers among other industry insiders, such as film critics, video store employees, and movie projectionists with pre- or early release access to films. n117 For example, two film critics were indicted in Operation Copycat for selling advance copies of films online, one claiming to have sold more than thirty-one films and the other more than one hundred advance copies. n118 Film critics and movie projectionists could be required to sign additional confidentiality agreements that spell out stiff civil remedies for selling or [*352] disclosing copyrighted films to third parties as well as the potential for discharges or loss of any applicable licenses for offending employees.

The theater and movie industries could limit camming as well as the theft or illegal disclosure of film prints through the use of digital projection and distribution technology. n119 Digital projection systems replace physical copies of

films with digital ones that contain imperceptible "forensic trackers." n120 With digital cinema, physical prints need not be moved between theaters, n121 avoiding opportunities for theft or disclosure. Although digital projection does not prevent camming, investigators can examine the illicit copies for forensic markers, such as audio tones outside of human hearing or additional video frames unseen by the human eye, but captured on the camcorder which indicates the date, time, and location of the cammed movie. n122 The identifying information can be used to determine the source of the camming n123 and may aid in efforts to improve film protection and security at that theater. Inserting additional frames imperceptible to the audience, but picked up by the camcorder, also helps to degrade the quality of illegal copies. n124

This technological option already exists, but the cost of transitioning to the new digital equipment has led many theater owners to balk at this opportunity. n125 In 2005, cinema giants AMC Entertainment, Cinemark USA, and Regal Entertainment agreed to work together to volume purchase some of the devices to reduce costs and to create finance options to spread the costs of this new equipment. n126 It is expected that, by 2007, 4,000 digital cinema systems will be installed in the United States, a tiny influx against piracy in light of the nearly 38,000 movie screens in the [*353] United States n127 and another 100,000 movie screens worldwide. n128 But ultimately the MPAA and NATO will have to work together to speed up this transition globally by sharing the costs for these innovations n129 to help combat illegal camming and reduce chances for film print theft.

B. Pirates Give You Quick and Easy Access to a Great Selection of Movies at a Cheap Price

Pirates and illegal downloading sites owe much of their success to their ability to meet consumer demand for greater choice as well as faster and cheaper access to a wide selection of materials. Although civil litigation and criminal prosecution helped to decrease some illegal file sharing of music, the development of legal file-sharing sites is widely viewed as the main reason for the downturn in illegal downloading. n130 Most industry experts contend that the availability of cheap and fast access to digital products is essential to deter illegal file sharing. n131

While the music industry has improved its fortunes by embracing legal digital downloading, the movie industry has been more resistant to change and has stumbled in its attempts to take advantage of this technological shift. n132 Legal movie downloading sites have been roundly criticized for offering limited selections and film downloads priced nearly the same as physical media. Unappealing technical restrictions also have harmed the viability of these movie sites by requiring consumers to buy new kinds of DVD media, software, and burners, locking users into certain proprietary platforms to play the downloaded movie, and/or requiring users to view films within twenty-four hours to avoid self-deletion. n133

[*354] In addition, new movie downloads on legitimate sites are normally delayed by the industry's standard cycle of permitting films to first complete their theatrical runs before they move into other outlets, such as cable, pay-per-view, and DVD release. n134 Over the past few years, the window between theatrical and DVD release has remained largely unchanged, about four-and-a-half months. n135 Unlike the industry, pirates manage to offer films within hours of a movie theatrical premiere and sometimes before a film has been formally debuted, at low or no cost.

One way to beat the pirates at their own game would be to experiment with options that allow fast, easy, and cheap public access to films. A controversial strategy is to release a film on DVD and cable television on the same day as the theatrical release of a film. This approach, called "day and date" release, n136 may blunt some piracy by allowing the general public to view or download films immediately in a variety of ways. The day-and-date release strategy has been highly criticized by traditional movie distributors who see it as endangering their revenues. n137

Award-winning director Steven Soderbergh of *Traffic* n138 and *Ocean's Eleven* n139 fame teamed up with Magnolia Pictures, Landmark Theaters, and HDNet Movies, a cable TV channel, to propose making six films that would use the day-and-date strategy. Their first effort at day-and-date release was the experimental digital film *Bubble*, a mystery using amateur actors released in January 2006. n140 The major theater chains boycotted the film, so *Bubble* only opened in thirty-two theaters, including nineteen Landmark theater screens, grossing only \$ 200,000 in box office [*355] revenues. n141 However, the quirky film had some success in its revenues from HDNet, foreign presales, and DVD sales which were in excess of 100,000 units, more DVD sales than would be expected for this type of film under the standard distribution window. Undeterred by the mixed results, Magnolia and Soderburgh are planning to experiment with this approach on some future films. n142 Google Video has also undertaken some experimental film releases. In January 2006, Google provided online streaming of an independent filmmaker's digital thriller, *Waterborne*, for free for over two weeks as a marketing device. The service then opened the film up for free movie trailer downloads as well as film downloads in different formats; \$ 3.99 for high-definition (HD) and \$ 0.99 for low-definition versions.

The DVD release followed six weeks later, rather than the standard four-plus months. Although the initial revenues were disappointing, the experiment was considered an important first step for independent filmmakers seeking alternative channels for distribution as well as for consumers seeking quick and inexpensive access to content. n143

Subsequently, the Independent Film Channel announced that it would work with Comcast On-Demand to offer some independent films using the day-and-date release approach, permitting on-demand viewing at the same time as the theatrical release. n144 The movie industry needs to undertake more experimentation to provide consumers with quick and cost-effective access to a broad selection of films. As consumer demand for content continues to evolve and as consumer expectations for on-demand viewing increase, the development of creative and legal access to films will help benefit both the movie industry and consumers and deter movie piracy.

C. Pirates Let You Watch (Or Not Watch) Your DVD Anywhere You Want to in the World

Any good business recognizes that customer satisfaction is a key foundation for business success. Unlike the movie industry, pirates recognize that the customer is always right and that routinely irritating customers is bad for [*356] business. Pirated copies of films involve stripping away a broad range of DRM protections built into DVDs that are bundled into the content scrambling system (CSS). n145 The movie industry indicates that CSS is critical to protect copyrighted films from piracy and national laws, such as the DMCA, and international treaties criminalize tools that block or strip away CSS. n146 While the filmmakers have a right to protect their creative works, copyright laws and the WIPO Internet treaties recognize the need for a balance between public access to creative materials and the protection of the rights of copyright owners. n147 In the industry's zeal for DRM, its actions have unfairly tipped this delicate balance in favor of copyright owners in a manner that harms public access to legally acquired DVDs n148 and pushes honest consumers toward piracy. n149 Consumer advocates are calling for greater transparency on the breadth of DRM limitations. n150

Region codes or locks on DVDs are a good example of commercial abuse of DRM under the CSS regime that has little to do with copyright protection and much to do with anticompetitive economic protectionism and unfair limits on customer fair use rights. n151 In 1996 the movie industry and DVD device manufacturers divided the globe into eight regions with the U.S. being Region 1. n152 These industries collaborated to create the DVD Copy Control Association which will only permit the use of CSS, the [*357] gateway to DVD technology, to companies that agree to use CSS on their devices, including region locks. n153 Under this organization's mandates, the regional code embedded in the DVD must match the region code residing on the DVD device or else it will not play the DVD. n154 Therefore, region locks prevent consumers in one region of the world from playing back DVDs they legally purchased in another region of the world. n155 In 2005 the Blu-Ray Disc Association followed suit and adopted region codes for HD film releases, continuing these restrictive measures into the next generation of products. n156

Most consumers have no idea about region locks until after they have made an ill-fated purchase. Therefore, an individual who purchases an Australian film on vacation will not be able to play it on their DVD player in the United States because each country is in a separate, artificially created DVD region. n157 Similarly, researchers, educators, and students who may wish to explore another culture through film n158 or individuals who want to keep cultural ties with their native countries n159 are prevented from viewing items that they legally acquired because of region codes. Norwegian teen, Jon Johansen's desire to watch French DVDs by breaking these region locks led him and friends to create DeCSS to allow its viewing on a Linux DVD player and to post DeCSS code that circumvents DRM tools on the Internet. These action made him a marked man in the United States, but [*358] resulted in two acquittals in Norway. n160 In addition, many developing nations rely on donated or low-cost used goods to gain access to instructional and creative works which is blocked by region-coding measures. n161

Prior to the development of DVDs, VHS tapes were not subject to region locks. One could buy a VHS tape and play it on any VCR player anywhere. With the advent of DVDs, consumers have seen a marked decrease in their access to legally obtained films through the use of region locks. While consumers have the right to watch legitimate DVDs from another region, the DMCA and other similar national laws criminalize consumer efforts to circumvent region locks on their own DVD player as well as others who might provide tools to help consumers avoid them. n162

With most films now released only on DVDs, it is becoming virtually impossible for consumers to make effective use of the prior alternative of region-free VHS tapes. n163 Copyrighted books, vinyl records, CDs, or VHS tapes can be purchased and enjoyed anywhere. However, consumers may not use their legally purchased DVDs anywhere. Although one can buy DVDs from across the globe, consumers cannot play them without having regionally matched DVD players. In essence, law-abiding consumers end up with less access to their legally acquired materials than pirates and

those who trade or buy their illicit copies. Public access to creative works is being diminished unfairly under copyright law. n164

[*359] The consumer has few options to avoid region codes. Some consumers have altered their DVD players with mod chips that disable regional locks, which are illegal in the United States under the DMCA and of questionable legality in other nations. n165 Second, DVD viewers could import expensive region-free DVD players with disabled region locks. n166 However, the film industry recently introduced Regional Coding Enhancement to ensure that certain Region 1 DVDs will not even play on region-free DVD players. n167

Therefore, the consumer might be forced to buy multiple DVD players for each region represented in their DVD collection or multiple copies of the same DVD (if they can find it) to match the region code on their current DVD device. n168 The Copyright Office recognized that viewing nonregion DVDs is a noninfringing activity, yet concluded that any additional costs to consumers were a "mere inconvenience" and rejected a request for an exemption from region locks under the DMCA. n169

Recognizing the consumer's dilemma, some savvy DVD device makers, outside of the CSS licensing scheme, have found that DVDs may be coded for use in two separate regions that may share a common language and the same television format, such as the United Kingdom (Region2) and Australia (Region 4), and have begun to offer combination DVD players coded for both regions that utilize the PAL television format. n170 For the technically astute, some DVD players permit limited switching between regions, but remain stuck on one region once the maximum number of changes (usually 4 or 5) is reached, preventing further out-of-region movie screening. n171 Faced with having to shell out even more money to buy redundant equipment to view legally purchased films, n172 it is no surprise that pirates with their region-free DVDs are so successful.

[*360] The movie industry itself recognizes that frustrated consumers will pirate content n173 and its persistent use of region codes promotes a market for pirated films without DRM controls. Experts contend that region codes are technically distinct from other DRM tools and could easily be removed without hampering other antitheft controls. n174 The industry could follow the pirate's business model and offer region-free films, helping to reduce the demand for pirated films, but so far has chosen not to do so. Although the licensing mandates of CSS only bind DVD device makers, the film industry prefers to retain region locks purely for commercial and anticompetitive reasons, such as segmenting markets for film advertising and distribution purposes, n175 protecting theatrical revenues as movies are released over time globally n176 and keeping out parallel imports of DVDs. The region locks also allow the movie industry to engage in global price discrimination for the same titles, n177 to distribute poorer quality DVD options to non--Region 1 countries, n178 and to lock consumers into film collections and DVD devices solely from one artificially created region. n179

The industry's own failure to step away from this anticompetitive and anticonsumer approach is only further fueling the already healthy market for pirated films. To help decrease the piracy incentive, the industry need only remove region locks from its own products and allow the DVD Copy Control Association to release CSS licensees from the region lock requirement. n180 By ignoring this self-help remedy, the movie industry is forcing honest consumers to seek out pirated movies.

[*361] While region codes block honest consumers from viewing DVDs, the film industry conversely often forces viewers to watch certain DVD materials under the DRM regime. Typically, one cannot fast-forward past copyright declarations and warnings about illegal copying and distribution of films. In addition, under the guise of DRM, the film industry stops legitimate consumers from skipping past previews and other promotional materials at the start of a legally obtained DVD. n181 In some instances, parents may wish to skip over trailers for films or promotional ads they believe are inappropriate for their children's viewing. n182

Although copyright warnings are relevant to DRM and copyright protections, slipping in mandatory advertising materials about an upcoming film or DVD release under the DRM regime is absurd. While a reader can skip ahead in a book or a listener might fast-forward through a song, DVD viewers do not have the same control over their private movie experience. n183 Consumer advocates have pressed the Copyright Office for an exemption to access controls under the DMCA to allow purchasers to skip over promotional materials. However, the Copyright Office determined that "being forced to play (not necessarily watch) the promotional material constituted no more than a mere inconvenience for users" and refused to grant the exemption under the DMCA. n184 Unlike legitimate purchasers, [*362] those who purchase bootleg or illicit copies of DVDs are not required to play promotional materials. Clearly, pirates are smart enough to recognize that inconveniencing their users is bad for business. One wonders why the film industry has not similarly recognized the importance of customer satisfaction and the importance of allowing consumers to shape their

own DVD viewing experiences. As part of DRM, mandatory promotional materials are not relevant to copyright protection and the industry should stop forcing legitimate buyers to view their promotional materials.

D. Pirates Allow One to Make Personal Copies of One's Purchases

Consumers who legitimately purchase DVDs may wish to copy all or part of a DVD under the provisions of fair use. Some users may make noncommercial backup copies for personal use should the original be lost or damaged. In other cases, the consumer may wish to space-shift the DVD to different devices, such as other DVD players or computers in the home, at work, or on the road. For example, an individual may wish to make a personal copy of a DVD for viewing on an airplane flight or by passengers on a long car ride. In addition, educators and students may wish to copy portions of a DVD as part of a compilation of materials for critical review or educational comparison in classroom presentations. n185

Even though the Copyright Office has rejected the consumer's fair use right to make DVD copies as actionable infringements, courts have taken a different view finding that CSS may indeed block some fair uses of DVD materials, such as personal backup copies. While recognizing consumer rights to make copies in certain fair use instances, the courts have determined that access to tools they would need to circumvent CSS in order to make copies, such as DeCSS or DVD copying programs, are illegal under the DMCA. n186 [*363] Therefore, fair use is acknowledged, but the tools for consumers to take advantage of fair use are banned. In *Universal City Studios, Inc. v. Reimerdes*, the court recognized this obvious dilemma.

The use of technological means of controlling access to a copyrighted work may affect the ability to make fair uses of the work. Focusing specifically on the facts of this case, the application of CSS to encrypt a copyrighted motion picture requires the use of a compliant DVD player to view or listen to the movie. Perhaps more significantly, it prevents exact copying of either the video or the audio portion of all or any part of the film. This latter point means that certain uses that might qualify as "fair" for purposes of copyright infringement--for example, the preparation by a film studies professor of a single CD-ROM or tape containing two scenes from different movies in order to illustrate a point in a lecture on cinematography, as opposed to showing relevant parts of two different DVDs--would be difficult or impossible absent circumvention of the CSS encryption. n187

Outside the United States, private copying exceptions have long been recognized under copyright in such nations as Austria, Canada, France, Germany, Italy, and the Netherlands. n188 Consumer and legal advocates have challenged the ability of DRM to supersede national laws that permit private copying of legitimately purchased copyrighted materials. n189 EU nations have had difficulty trying to reconcile national laws on private copying with the EUCD's protections of DRM and it is unclear how these different approaches will be harmonized. n190 Italy left its private copy law intact, while Germany and Austria tightened up the breadth of private copying while legalizing only certain kinds of DRM systems. Similar to the United States, the United Kingdom determined that a case-by-case approach would work best in handling such fair use conflicts. n191 However, recent court decisions in France, Belgium, and Germany illustrate a growing trend away from allowing private copying in the digital environment. n192

[*364] In the absence of disclosure obligations on DVDs, most consumers have no idea that they cannot make backup copies until they try to do it. n193 Individuals who share or buy illicit DVDs do not have to contend with DRM and therefore can make unlimited copies, for themselves or anyone they wish. Meanwhile, honest consumers are once again punished when they buy legitimate DVDs because of undisclosed DRM restrictions. Disclosure of these limitations is one option, but it is important to recognize that DRM is a software issue that could also be reprogrammed to allow one or two private copies.

Critics of DRM have argued that, with piracy rampant in society, the film industry should be looking for alternative business models and creative compensation schemes rather than propping up outdated ones through tighter DRM controls. n194 Rather than limiting use through DRM, media industries should focus on developing new business models and tracking mechanisms to ensure payment, such as royalty funds, peer referral groups, and secure viewing groups. n195

For example, in Canada, copyrighted musical materials may be downloaded from file-sharing sites if limited to private use. n196 To compensate artists, the Canadian government taxes blank media and other recording products that provide revenues for a royalty fund that compensates artists. n197 Other countries, such as Sweden and Finland, have broadened private copying taxes to a wide range of blank media, including DVDs, that allow some copying for non-

commercial purposes by placing levies on the copying tools and accessories to fund royalties for copyright holders.
n198

[*365] With a peer referral system, individuals recommend video playlists to others who receive a limited number of free plays. If, after their free plays, they decide to purchase the item, then the referring member receives a commission on the legitimate purchase. n199

Under secure viewing groups, a purchaser or subscriber would be allowed to make copies and use media within a registered network of televisions, computers, and cell phones. In this environment, consumers can make personal copies of legally obtained materials for viewing among a variety of devices. n200 Currently, TiVo offers TiVoToGo to its DVR subscribers as a way of allowing them access to materials between various registered devices. n201 By reshaping DRM to emphasize payment tracking and new compensation schemes, rather than broadly restricting use, the movie industry would provide legitimate purchasers with copying opportunities that pirates already offer to their customers.

E. Pirates Don't Care About Proprietary DRM Formats

Despite the record-breaking box office revenues in 2006, the film industry still makes most of its money from home video entertainment (47.1%) and not from theater revenues (15.7%). n202 In addition, the MPAA has found that their most avid moviegoers either own or subscribe to five or more home-based technologies. n203 As devices for viewing content proliferate, legitimate file sharers and consumers are discovering on their own that different media distributors are using different DRM formats. While users may have a variety of hardware for viewing content, they may find that content they legitimately downloaded or purchased may only play on [*366] certain complementary device platforms. n204 For example, films purchased at the iTunes Store may only operate on Apple devices while a film purchased as a DVD cannot be easily transferred for viewing on a video iPod. n205 In November 2006 the MPAA sued Load 'N Go services under the DMCA for ripping and reencoding consumers' legally obtained DVDs for viewing on their iPods. n206

Because DRM is focused on restricting use, consumers find themselves in the position of trying to determine which DRM format will provide them with the broadest range of devices for viewing, sometimes referred to as a "DRM ecosystem." n207 Ultimately, consumers once again are locked into one set of devices with little opportunity to change platforms without considerable expense. n208 Furthermore, consumers have to deal with software or product updates that may make their prior content purchases obsolete or inoperable. n209 The industry itself has recognized that the lack of DRM interoperability between home devices has also pushed many legitimate consumers to piracy. n210

The movie business is calling for the establishment of an interoperable DRM solution that will maximize the consumer's ability to play content on multiple devices. n211 The establishment of DRM standards or protocols is one way to improve interoperability and make it easier for consumers to use legally obtained movies on a variety of devices without sacrificing the protection of copyright. n212 However, concerns have been raised that dominant media players will attempt to skew any protocols to [*367] maximize benefits for their own platforms. n213 Unfortunately, with three separate organizations working on different DRM interoperability standards or protocols for home networks, it is unlikely that a uniform solution will emerge any time soon. n214

While some battle over the proper DRM standards for increased interoperability, others contend that the real problem is the unwillingness of companies to step away from proprietary formats to open-source formats, such as OGG formats. n215 Open-source formats could be licensed for use on a broad range of platforms, dramatically reducing DRM interoperability obstacles. n216 Open-source advocates contend that OGG formats will spur unprecedented innovation and creativity in video devices which has long been dormant under the control of the DVD Copy Control Association as well as promote consumer choice as to device platforms. n217

Despite calls for improved DRM interoperability, the continuing problem works to the benefit of the film business so there is no real urgency from the industry's perspective.

It's perfect for the movie studios . . . [T]hey get to sell you the same content multiple times for multiple devices. Say you purchased a copy of *The Hitchhiker's Guide to the Galaxy* when it came out on DVD. If you want a version to play on your iPod, you have no legal way of getting one other than spending \$ 9.99 for an iPod friendly copy at the iTunes Store. It's a great scheme for the movie studios, but really bad news for consumers. n218

Although the movie industry cries "crocodile tears" over DRM interoperability, pirates do not make their customers hassle with such worries. Pirates are not wedded to any proprietary DRM format so they just [*368] strip out DRM controls, making it easier for their customers to use or customize their purchases for use on different devices. Once again, the honest consumer remains disadvantaged, largely because the movie industry cannot or is not motivated to solve the DRM interoperability problem it helped to create.

V. CONCLUSION

It is obvious that the enactment of tougher criminal laws and the tightening of DRM controls have done little to blunt movie piracy worldwide and have pushed many honest consumers to seek out pirated films and DRM circumvention tools. In order to compete with the piracy model, the movie and theater industries need to undertake a serious review of numerous self-help remedies that will aid efforts to thwart piracy without alienating their customer base and straining limited public law enforcement resources. First, the supply of pirated films, coming primarily from industry insiders, can be severely limited through improved theater security, strengthened employee training and supervision, greater reward incentives against camming, and serious civil sanctions and workplace consequences for offending insiders. In addition, the movie makers and theater owners should collaborate to accelerate the transition to digital cinema systems that offer greater protections from illegal camming and help decrease opportunities for the theft or improper disclosure of film prints.

Second, the film business should creatively experiment with ways to offer the public faster and cheaper access to a broad selection of films. Movie file-sharing sites need to provide better and more cost-effective film downloading options and be revamped to decrease onerous and expensive technical requirements and to improve the breadth of site offerings. The industry also should continue to experiment with new release strategies aimed at speeding up public access to films.

Third, the film industry should seriously reevaluate the benefits and burdens of DRM. Unnecessary DRM controls, such as region locks and required promotional materials, should be immediately removed. Future programming of DRM controls on DVDs could be coded to allow legitimate purchasers to make at least one personal copy of their legally obtained films. Rather than focusing on limiting consumer use through restrictive DRM measures, the movie industry also should develop and [*369] implement new business models focusing on tracking payment and usage, such as royalty funds, peer referral systems, and secure viewing groups.

Lastly, the movie industry should be driving hard to resolve the DRM interoperability problem it helped to foster so that consumers can fairly use their purchased works on a wide range of devices without being locked into certain proprietary device platforms. Although unified efforts to establish DRM standards and protocols may be one path, open-source formats may better serve the long-term needs of consumers while invigorating innovation in the movie device manufacturing sector.

Despite these numerous self-help remedies, the movie industry will likely opt to continue on the same path of demanding tougher criminal sanctions and prosecutions while maintaining DRM measures that are certain to irritate their legitimate customers and promote the consumer demand for pirated films. At most, the industry may grudgingly offer to disclose the impact of DRM controls on consumers in the fine print that pirates would not bother their customers with in this competitive environment. Unfortunately, the film industry seems to be moving slower than a dinosaur in *Jurassic Park* to learn the customer satisfaction lessons of the business model of piracy, ensuring that their disaster movie, *Global Movie Piracy*, will have a long and successful run worldwide.

Legal Topics:

For related research and practice materials, see the following legal topics:

Copyright LawCivil Infringement ActionsGeneral OverviewCopyright LawCriminal OffensesGeneral OverviewEvidenceDemonstrative EvidenceVisual Formats

FOOTNOTES:

n1 Howard Rabinowitz, *The End is Near! Why Disaster Movies Make Sense in the '90s--and Dollars*, Wash. Monthly, Apr. 1997, http://findarticles.com/p/articles/mi_m1316/is_n4_v29/ai_19279949.

n2 THE TOWERING INFERNO (Irwin Allen Prods. 1974).

n3 JURASSIC PARK (Universal Pictures 1993).

n4 EARTHQUAKE (Filmmakers Group 1974).

n5 TWISTER (Warner Bros. Pictures 1976).

n6 ARMAGEDDON (Touchstone Pictures 1998).

n7 WAR OF THE WORLDS (Paramount Pictures 1953).

n8 THE DAY AFTER TOMORROW (Twentieth Century-Fox Film Corp. 2004).

n9 MPAA, 2005 U.S. PIRACY FACT SHEET <http://www.mpa.org/USpiracyfactsheet.pdf> (last visited Dec. 15, 2007) [hereinafter MPAA 2005 FACT SHEET]. In coordination with global law enforcement, the international Motion Picture Association (MPA) reported 43,000 antipiracy raids in which more than 81 million illegal DVDs were seized. *Id.* In addition, the MPA asserted that over 100 major Internet piracy facilitators and seven of the major Internet release or warez groups were shut down. *Id.*

n10 Press Release, MPAA, Motion Picture Piracy Costs U.S. Economy Thousands of Jobs, Billions in Lost Wages (Sept. 29, 2006), <http://www.mpa.org/PressReleases.asp> (follow "search" hyperlink, then enter title). The Institute for Policy Innovation, a nonprofit think tank, also found that movie piracy cost \$ 5.5 billion in lost wages and \$ 20.5 billion in lost productivity. STEPHEN E. SIWEK, INSTITUTE FOR POLICY INNOVATION, THE TRUE COST OF MOTION PICTURE PIRACY TO THE U.S. ECONOMY 2 (Sept. 2006), <http://www.ipi.org/ipi/IPIPublications.nsf/PublicationLookupFullText/E274F77ADF58BD08862571F8001BA6BF> (last visited Dec. 31, 2007). *See infra* note 26 and accompanying text (criticisms of claimed movie industry losses due to piracy).

n11 Richard Taylor, Senior V.P., External Affairs & Educ., MPAA, Presentation to the Subcommittee on Courts, the Internet, and Intellectual Property: Piracy on Campus: An Overview of the Problem and a Look at Emerging Practices to Reduce Online Theft of Copyrighted Works (Sept. 22, 2005), at 2, <http://www.mpa.org/MPAA%20testimony%20for%209.22.05%20hearing.pdf>. Mr. Taylor also claimed that the average film costs approximately \$ 100 million. *Id.* He indicated that six in ten films never break even and must often rely on the ancillary markets of home video, pay per view, cable, and free TV in hopes of making a profit or breaking even. *Id.* Mr. Taylor cited Deloitte and Touche estimates that find that nearly 400,000 movies are illegally downloaded each day, further risking the economic viability of movie making. *Id.*

n12 Michael Liedtke, *Google Video Suit could Signal YouTube Trouble Ahead*, USA TODAY, Nov. 8, 2006, http://www.usatoday.com/tech/news/2006-11-08-google-sued_x.htm; Alex Veiga, *Morris: YouTube, MySpace Abuse Copyright*, ASSOCIATED PRESS, Sept. 14, 2006; Martyn Williams, *YouTube Tackles Copyright*, PC WORLD, Sept. 2006, <http://www.pcworld.com/article/id,128743/article.html>. *See also supra* note 11 and accompanying text (estimates of illegally downloaded films each day).

n13 *MGM Studios, Inc. v. Grokster, Ltd.*, 545 U.S. 913 (2005) (holding that peer-to-peer file-sharing sites may be held liable for vicarious and/or contributory copyright infringement); *Universal City Studios, Inc. v. Corley*, 273 F.3d 429 (2d Cir. 2001) (holding that DeCSS or DVD copying programs are illegal under DMCA); *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 294 (S.D.N.Y. 2000) (enjoining defendants from posting DeCSS and/or electronically linking their site to other sites that posted DeCSS). *See also* MPAA 2005 FACT SHEET, *supra* note 9 (discussing recent law enforcement antipiracy raids).

n14 *321 Studios v. MGM Studios, Inc.*, 307 F. Supp. 2d 1085 (N.D. Cal. 2004) (holding that providing DVD duplication software, even for fair use copying, violated anticircumvention provisions of the DMCA). *See also* John Borland, *Judge: DVD-copying Software is Illegal*, CNET NEWS.Com, Feb. 20, 2004, http://www.news.com/2100-1025_3-5162749.html (reviewing 321 Studios' legal battles with the motion picture industry).

n15 Steven Daly, *Pirates of the Multiplex*, Vanity Fair, Mar. 2007, at 284, 286; Lori A. Morea, *The Future of Music in a Digital Age: The Ongoing Conflict between Copyright Law and Peer-to-Peer Technology*, 28 CAMPBELL L. REV. 195, 212 (2006); MPAA 2005 Fact Sheet, *supra* note 9.

n16 *See* John B. Clark, *Copyright Law and the Digital Millennium Copyright Act: Do the Penalties Fit the Crime?*, 32 NEW ENG. J. ON GRIM. & CIV. CONFINEMENT 373, 391-92 (2006); HEDI NASHERI, NAT'L INST. OF JUST., THE INT'L CENTER DEPT. OF JUST., ADDRESSING GLOBAL SCOPE OF INTELLECTUAL PROPERTY LAW 65-66 (Nov. 2004), <http://www.ncjrs.gov/pdffiles1/nij/grants/208384.pdf>; MPAA 2005 FACT SHEET, *supra* note 9. In his report for the Department of Justice, Mr. Nasheri stated that

[intellectual property] piracy is unfortunately considered as a low-risk, high profit criminal enterprise which is widely tolerated and universally ignored. It is common for the public to think of [intellectual property] piracy as a victimless crime, a minor economic offense that only affects wealthy corporations and does no real harm to society or to individuals ... Law enforcement and prosecutors get little credit for arrests and/or seizures. It's often viewed as a civil enforcement problem and often time the question becomes so why not let the wealthy companies or the wealthy industries police this problem themselves?

NASHERI, *supra*, at 80-81 (footnotes omitted). *See* Morea, *supra* note 15, at 410-11 (asserting that civil lawsuits and injunctive relief can be "highly effective at curbing infringement"). In addition, differing social or cultural views of copyright infringement create a great deal of "moral ambiguity" about or indifference to illegal downloading. Eric Goldman, *A Road to No Warez: The No Electronic Theft Act and Criminal Copyright Infringement*, 82 OR. L. REV. 369, 401 (2003); Morea, *supra* note 15, at 222; NASHERI, *supra* note 16, at 18.

n17 MPAA 2005 FACT SHEET, *supra* note 9; WORLD INTELLECTUAL PROPERTY ORGANIZATION (WIPO) PROGRAM ACTIVITIES: CAMPAIGNS 1 (2007), http://www.wipoint/ip-development/en/creative_industry/campaigns.html (last visited Sept. 7, 2007).

n18 Bryan Gardiner, *MPAA: Frustrated Consumers Will Pirate*, PCMAG.Com, Oct. 16, 2006, http://www.pcmag.com/print_article2/0,1217,a=191502,00.asp; Taylor, *supra* note 11, at 2-3.

n19 Gardiner, *supra* note 18; Taylor, *supra* note 11, at 2-3 & 7.

n20 See *infra* note 160 and accompanying text.

n21 See *infra* note 165 and accompanying text.

n22 ELECTRONIC FRONTIER FOUNDATION (EFF), REPLY COMMENT OF THE ELECTRONIC FRONTIER FOUNDATION 3-4 & 6 (2006), http://w2.eff.org/IP/DMCA/copyrightoffice/2006_DMCA_RM_EFF_reply_comments.pdf [hereinafter EFF REPLY COMMENT]; Stuart Haber et al., *If Piracy is the Problem, Is DRM the Answer?*, in DIGITAL RIGHTS MANAGEMENT 231 & 233 (Eberhard Becker et al. eds., 2003). Mr. Haber and his coauthors at Hewlett-Packard stated that "[o]rdinary DRM will not prevent piracy and it is questionable whether or not draconian DRM can be effective either. Legal attacks will probably never make the Darknet completely go away." *Id.* at 231.

n23 Clark, *supra* note 16, at 391 & 402-03; Justin D. Fitzdam, *Private Enforcement of the Digital Millennium Copyright Act: Effective without Government Intervention*, 90 CORNELL L. REV. 1085, 1093-94 (2005). In discussing criticisms of the DMCA, Mr. Fitzdam notes that

the DMCA allows copyright owners to override fair use rights. Under traditional fair use doctrine, individuals are allowed to make incidental copies of copyrighted material without first obtaining the consent of the copyright owner. Some critics believe the fair use doctrine no longer applies in the electronic arena.

Id. at 1094 (footnotes omitted). See *infra* notes 66 & 161 and accompanying text.

n24 Clark, *supra* note 16, at 390-91; NASHERI, *supra* note 16, at 65-66; Debra Wong Yang & Brian M. Hoffstadt, *Countering the Cyber-crime Threat*, 43 AM. CRIM. L. REV. 201, 212 (2006). But see Matthew Sag, *Piracy: Twelve Year-Olds, Grandmothers, and Other Good Targets for the Recording Industry's File Sharing Litigation*, 4 Nw. J. TECH. & INTELL. PROP. 133, 149 (2006) (contending that industry should not sue "high volume uploaders" because they are less likely to be deterred from their conduct, but rather "comparatively innocent file sharers" who are more likely to switch to legitimate sites to avoid litigation).

n25 Fitzdam, *supra* note 23, at 1094; Brian P. Heneghan, *The NET Act, Fair Use, and Willfulness - Is Congress Making a Scarecrow of the Law?*, 1 J. HIGH TECH. L. 27, 35-37 (2002). Recent conflicts have arisen over postings of copyrighted video content that may ultimately redefine the extent of fair use protection as regards parody in the online world. See Anick Jesdanun, *Viacom Sued Over YouTube Parody Removal*, ABC NEWS, Mar. 22, 2007, <http://abcnews.go.com/Entertainment/wireStory?id=2973212>; Press Release, EFF, Free Speech Battle Over Online Parody of "Colbert Report," Mar. 22, 2007, <http://www.eff.org/deeplinks/2007/03/free-speech-battle-over-online-parody-colbert-report>.

n26 EFF REPLY COMMENT, *supra* note 22, at 4 & 7-8; Jay Lyman, *Analysts Question MPAA's Findings on Film Piracy*, CRMBUYER, July 9, 2004, <http://www.crmbuyer.com/story/news/35036.html>. Yankee Group senior industry analyst Mike Goodman challenged the MPAA's selective use of statistics to make its case against illegal movie downloaders. For example, the MPAA claimed that 17% of illegal downloaders were attending movies less frequently. But Goodman noted that the MPAA failed to mention "that three times as many downloaders [41%] reported increased movie attendance" while "43% of movie downloaders reported going to the movies the same amount." *Id.* Goodman stated, "Not only is it having no effect, these are your best customers" and "these people are more aficionados, and [downloading] has no effect on their moviegoing behavior." *Id.*

n27 Press Release, MPAA, 2006 Box Office Rebounds (Mar. 6, 2007), http://www.mpa.org/press_releases/2006%20market%20stats%20release5%20final.pdf.

n28 EFF REPLY COMMENT, *supra* note 22, at 3-4 & 8-9.

n29 Daly, *supra* note 15, at 287; Jemima Kiss, @ *MIPCOM: Piracy is a Business Model, says Disney Co-Chair Anne Sweeney*, PAIDCONTENT.ORG., Oct. 9, 2006, <http://www.paidcontent.org/entry/mipcom-piracy-is-a-business-model-says-disney-co-chair-anne-sweeney>. See *infra* note 31 and accompanying text (supporting Sweeney's notion of competing with piracy).

n30 Kiss, *supra* note 29.

n31 Haber et al., *supra* note 22, at 233. In this Hewlett-Packard report, the authors echoed Ms. Sweeney's observation, concluding that "currently proposed technical measures will not be able to completely stop the illegitimate distribution of pirated content. We believe that content producers must take steps to compete with the piracy as an alternative." *Id.*

n32 See *id.*

n33 MPAA 2005 FACT SHEET, *supra* note 9.

n34 MPAA, Theatrical Camcorder Piracy, http://www.mpa.org/piracy_theatrical_cam.asp (last visited Dec. 15, 2007) [hereinafter MPAA Camcorder Piracy]; NASHERI, *supra* note 16, at 54; Operation Buccaneer, Department of Justice, <http://www.usdoigov/criminal/cybercrime/ob/OBMain.htm> (last visited Dec. 14, 2007).

n35 MPAA 2005 FACT SHEET, *supra* note 9; MPAA Camcorder Piracy, *supra* note 34.

n36 MPAA 2005 FACT SHEET, *supra* note 9.

n37 NASHERI, *supra* note 16, at 19, 21 & 35; Operation Buccaneer, *supra* note 34. Mr. Nasheri stated that Russia has "one of the worst piracy situations in the world" with "sophisticated organized criminal groups controlling the duplication and distribution of pirate product." NASHERI, *supra* note 16, at 21.

n38 Gwenda Bennett & Pamela Gershuny, *Ahoy Music Pirates! Navigating the Past, Present, and Future of Preemption Defenses to State and Federal Criminal Laws*, 33-34 (Aug. 2006), <http://www.alsb.org/Proceeding%20Files/2006/Bennett-Gershuny.pdf>; MPAA 2005 FACT SHEET, *supra* note 9; MPAA, Fighting Optical Disc Piracy Around the World, <http://www.mpa.org/piracy-OptDisk.asp> (last visited Dec. 15, 2007) [hereinafter MPAA Optical Disc Piracy].

n39 MPA Europe, http://www.mpa.org/inter_europe.asp (last visited Dec. 15, 2007).

n40 Bennett & Gershuny, *supra* note 38, at 34.

n41 *Id.* at 34 & 38; NASHERI, *supra* note 16, at 8, 13 & 41; Operation Buccaneer, *supra* note 34.

n42 MPAA Optical Disc Piracy, *supra* note 38.

n43 Request for Consultations, WTO Dispute WT/DS362/1 (Apr. 10, 2007), *available at* <http://docsonline.wto.org/DDFDocuments/t/G/L/819.doc>. *See also* *Washington Files WTO Piracy Cases Against China*, REUTERS, Apr. 10, 2007; *U.S. Files WTO Piracy Case Against China*, ASSOCIATED PRESS, Apr. 10, 2007. *See U.S. Plans WTO Charge on China Piracy Goods*, BOSTON GLOBE, Apr. 7, 2007, http://www.boston.com/business/globe/articles/2007/04/07/us_plans_wto_charge_on_china_piracy_goods/; Mark Drajem, *U.S. Plans WTO Case Against China on Movies, Books*, BLOOMBERG.COM, Apr. 6, 2007, http://www.boomberg.net/apps/news?pid=20602081&sid=adazsvpNIITI&refer=benchmark_currency_rates.

n44 MPAA 2005 FACT SHEET, *supra* note 9.

n45 Stephen Granade, *Warez, Abandonware and the Software Industry*, <http://brasslantern.org/community/companies/warez-b.html> (last visited Dec. 14, 2007); Operation Buccaneer, *supra* note 34.

n46 Goldman, *supra* note 16, at 404-06; Granade, *supra* note 45.

n47 Goldman, *supra* note 16, at 407-08 (Warez traders often perceive themselves "as benefactors for the oppressed, like a cyber-Robin Hood . . . and bitterly oppose commercial pirates who, like software manufacturers, commit the sin of charging for what should be free."); NASHERI, *supra* note 16, at 35-36.

n48 Sag, *supra* note 24, at 142-43. Peer-to-peer file sharers may find that they are more likely to expose themselves to computer viruses and spyware through the use of these sites. *Id.* at 142.

n49 MPAA 2005 FACT SHEET, *supra* note 9.

n50 *Id.*

n51 *Id.*

n52 Lyman, *supra* note 26.

n53 *Id.*

n54 Operation Buccaneer, *supra* note 34; Press Release, U.S. Department of Justice, Thirtieth Copyright Conviction as Part of Operation Copycat, June 20, 2006, <http://sanfrancisco.fbi.gov/dojpressrel/2006/sf062006.htm>.

n55 MPAA 2005 FACT SHEET, *supra* note 9; Operation Buccaneer, *supra* note 34.

n56 MPAA 2005 FACT SHEET, *supra* note 9; Press Release, U.S. Department of Justice, *supra* note 54.

n57 MPAA 2005 FACT SHEET, *supra* note 9. *See* Operation Buccaneer, *supra* note 34; Press Release, U.S. Department of Justice, *supra* note 54; Press Release, U.S. Customs Service, U.S. Customs Dismantles Sophisticated Internet Piracy Network (Dec. 11, 2001), <http://www.customs.ustreas.gov/hot-new/pressrel/2001/1211-00.htm>.

n58 MPAA 2005 FACT SHEET, *supra* note 9. *See* Operation Buccaneer, *supra* note 34; Press Release, U.S. Department of Justice, *supra* note 54.

n59 Members of the software, recording, and movie industries all testified before and lobbied Congress to strengthen and expand civil and criminal liability for piracy, especially illegal file sharing. Bennett & Gershuny, *supra* note 38, at 2, 11 & 14; Daly, *supra* note 15, at 284 & 286; Heneghan, *supra* note 25, at 1; Morea, *supra* note 15, at 212; MPAA 2005 FACT SHEET, *supra* note 9.

n60 Clark, *supra* note 16, at 391; NASHERI, *supra* note 16, at 46 (contending that civil litigation may not be sufficient to deter intellectual property theft because "some [intellectual property] thieves view civil damages as simply another cost of doing business.").

n61 Pub. L. No. 105-147, 111 Stat. 2678 (1997) (codified in scattered sections of 17 U.S.C. and 18 U.S.C.). *See* Clark, *supra* note 16, at 379-81 & 383-85; Goldman, *supra* note 16, at 369-71 & 376; Eric Goldman & Julia Alpert Gladstone, "No Electronic Theft Act" Proves a Partial Success, NAT'L L.J. Mar. 17, 2003, at B9; Morea, *supra* note 15, at 215-17.

n62 The Act revises the definition of financial gain to include "receipt, or expectation of receipt, of anything of value, including the receipt of other copyrighted works." 17 U.S.C. § 101 (2000). *See* Robin Andrews, *Copyright Infringement and the Internet: An Economic Analysis of Crime*, 11 B.U. J. SCI. & TECH. L. 256, 266 (2005); Goldman, *supra* note 16, at 373 & 376.

n63 The Act allows for criminal copyright prosecutions resulting from:

(B) . . . the reproduction or distribution, including by electronic means, during any 180-day period, of 1 or more copies or phonorecords of 1 or more copyrighted works, which have a total retail value of more than \$ 1,000; or

(C) by the distribution of a work being prepared for commercial distribution, by making it available on a computer network accessible to members of the public, if such person knew or should have known that the work was intended for commercial distribution.

17 U.S.C. § 506(a)(1)(B)-(C) (2000). *See* Clark, *supra* note 16, at 379-81 & 383-85; Goldman, *supra* note 16, at 373 & 376; Goldman & Gladstone, *supra* note 61, at B9; Morea, *supra* note 15, at 215-16.

n64 Pub. L. No. 105-304, 112 Stat. 2860 (1998) (codified at 17 U.S.C.S. § 1201 (2007)). For additional review of the anticircumvention provisions of the DMCA, see GERALD R. FERRERA ET AL., *CYBER LAW: TEXT AND CASES* 101-02 (2d ed. 2004); Onimi Erekesima & Brian Koosed, *Intellectual Property Crimes*, 41 AM. CRIM. L. REV. 809, 830 (2004); Fitzdam, *supra* note 23, at 1089; Morea, *supra* note 15, at 201.

n65 17 U.S.C. § 1201(c)(3) (2000). *See also* FERRERA ET AL., *supra* note 64, at 101.

n66 *See, e.g.*, EFF, DMCA TRIENNIAL RULEMAKING: FAILING THE DIGITAL CONSUMER 1-2 & 6-5 (Dec. 2005), http://www.eff.org/IP/DMCA/copyrightoffice/DMCA_rulemaking_broken.pdf [hereinafter EFF TRIENNIAL RULEMAKING]; Paul Sweeting, *Copyright Office Shoots Down DMCA Exemptions*, VIDEO BUSINESS ONLINE, Oct. 28, 2003, <http://www.videobusiness.com/index.asp?layout=articlePrint&articleID=CA615549>. The EFF chided the Copyright Office for its failure to accept any exemptions to the DMCA's anticircumvention provisions, including refusing to allow consumers to make personal backup copies of legitimately purchased media and allowing the movie industry to insert region codes into DVDs which had not existed under VHS technology. EFF TRIENNIAL RULEMAKING, *supra*, at 1-2 & 4-5. The EFF stated that

[t]he Copyright Office has turned these settled fair use principles on their head in the DMCA rulemaking process. Rather than treating fair use as a forward-looking, evolving regime, the Copyright Office has made it backward-looking, effectively barring courts from addressing fair use implications of new digital consumer technologies in the 21st century.

Id. at 6.

n67 The Copyright Office granted no exemptions in 2000 and 2003. EFF TRIENNIAL RULEMAKING, *supra* note 66, at 1-2; Sweeting, *supra* note 66. However, the Copyright Office did allow for six very narrow exemptions in 2006, with only one related to fair use of video recordings. Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 37 C.F.R. § 201.40 (2006). The video recording exemption indicated that DRM might be circumvented for "[a]udiovisual works included in the educational library of a college or university's film or media studies department, when circumvention is accomplished for the purpose of making compilations of portions of those works for educational use in the classroom by media studies or film professors." *Id.* This narrow exemption would not apply to educators who are not media studies professors or to students and would apply only to materials contained in educational libraries, not personal copies.

n68 Arnotts Lawyers, *Chipping at the Mod Chip Copyright Case*, <http://www.arnotts.net.au/modchip-case.html> (last visited Dec. 14, 2007); EFF ET AL., DIGITAL RIGHTS MANAGEMENT (DRM): A FAILURE IN THE DEVELOPED WORLD, A DANGER TO THE DEVELOPING WORLD 9-11 (2005) [hereinafter EFF REPORT]; WIPO Copyright FAQ, http://www.wipo.int/copyright/en/faq/faqs.htm#p21_3830 (last visited Dec. 14, 2007).

n69 WIPO Copyright FAQ, *supra* note 68.

n70 WIPO Copyright Treaty, Dec. 20, 1996, U.S.L.O.C. 105-17, 2186 U.N.T.S. 38542, *available at* http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html.

n71 WIPO Performances and Phonogram Treaty, Dec. 20, 1996, U.S.L.O.C. 105-17, 2186 U.N.T.S. 38542, available at <http://www.wipo.int/treaties/en/ip/wppt/index.html>.

n72 WCT, *supra* note 70, art. 11; WPPT, *supra* note 71, art. 18.

n73 Council Directive 2001/29 2001 O.J. (L 167/10) (EC).

n74 *Id.* art. 6(1-2). Article 6 of the directive states:

1. Member States shall provide adequate legal protection against the circumvention of any effective technological measures, which the person concerned carries out in the knowledge, or with reasonable grounds to know, that he or she is pursuing that objective.

2. Member States shall provide adequate legal protection against the manufacture, import, distribution, sale, rental, advertisement for sale or rental, or possession for commercial purposes of devices, products or components or the provision of services which:

(a) are promoted, advertised or marketed for the purpose of circumvention of, or

(b) have only a limited commercially significant purpose or use other than to circumvent, or

(c) are primarily designed, produced, adapted or performed for the purpose of enabling or facilitating the circumvention of, any effective technological measures.

Id. See Urs Gasser & Michael Girsberger, *Transposing the Copyright Directive: Legal Protection of Technological Measures in EU-Member States, A Genie Stuck in the Bottle?*, Nov. 2004,1, at 9-10, <http://cyber.law.harvard.edu/media/files/evcd.pdf>; PRIVATKOPIE.NET, PUTTING USERS AT THE CENTRE--ACHIEVING AN "INFORMATION SOCIETY FOR ALL 2 & 4-6 (Sept. 2004), http://www.privatkopie.net/files/privatkopie-bof_on-DRM.pdf; J. David Goodman, *Consumers Fight Copy Protection*, INT'L HERALD TRIB., Nov. 11, 2005, <http://www.ihf.com/articles/2005/11/11/business/ptcopy12.php>.

n75 Goodman, *supra* note 74; PRIVATKOPIE.NET, *Supra* note 74, at 4-8.

n76 EFF TRIENNIAL RULEMAKING, *supra* note 66, at 1-2 & 4-7; CENTER FOR DEMOCRACY & TECHNOLOGY (CDT), EVALUATING DRM: BUILDING A MARKETPLACE FOR THE CONVERGENT WORLD 5-6 & 14-17 (2006), <http://www.cdt.org/copyright/20060907drm.pdf>; PRIVATKOPIE.NET, *supra* note 74, at 4-10; IP JUSTICE, COMMENTS OF IP JUSTICE 4-5 (2002), http://www.ipjustice.org/IPJ_1201_Comments.shtml.

n77 See CENTER FOR DEMOCRACY & TECHNOLOGY, *supra* note 76, at 14-15; PRIVATKOPIE.NET, *supra* note 74, at 2 & 4-5.

n78 Pub. L. No. 109-9, 119 Stat. 218 (codified as amended at various sections of titles 17 and 18 of the U.S. Code).

n79 18 U.S.C.A. § 2319B (West 2007).

n80 17 U.S.C. § 506(a)(1)(C) (West 2007). *See* MPAA Camcorder Piracy, *supra* note 34; MPAA 2005 FACT SHEET, *supra* note 9.

n81 Some thirty-nine states already prohibit the use of any recording device, including camcorders, in movie theaters. Nat'l Conf. of State Legislatures, Camcorders or Recording Devices in Movie Theatres (June 2006), <http://www.ncsl.org/programs/lis/CIP/tapein-theaters0304.htm> (listing state statutes that prohibit recording devices in movie theatres); State Statutes Prohibiting The Operation of a Recording Device in a Movie Theater, <http://www.fightfilmtheft.org/en/states.asp> (last visited Dec. 31, 2007).

n82 Daly, *supra* note 15, at 284 & 286. *See* MPA, MPA Asia Pacific (2005), http://www.mpaa.org/inter_asia.asp; MPA Europe, *supra* note 15; MPAA 2005 FACT SHEET, *supra* note 9.

n83 Press Release, U.S. Department of Justice, *Five Additional Defendants Charged in Crackdown Against Worldwide Internet Piracy Groups*, Apr. 27, 2006, <http://www.usdoj.gov/criminal/cybercrime/fuchsCharge.htm>. *See* Justice Department Conducts International Internet Piracy Sweep, 22 COMPUTER & INTERNET LAWYER 34 (2005).

n84 MPAA 2005 FACT SHEET, *supra* note 9.

n85 Drajem, *supra* note 43; *U.S. Plans WTO Charge*, *supra* note 43.

n86 *See* Drajem, *supra* note 43.

n87 NASHERI, *supra* note 16, at 66. *See supra* note 16 and accompanying text (indicating additional reasons for the lack of support for law enforcement efforts against piracy).

n88 Daly, *supra* note 15, at 282.

n89 Morea, *supra* note 15, at 222; NASHERI, *supra* note 16, at 65. *See supra* note 16 and accompanying text.

n90 Nicole Leeper Piquero & Alex R. Piquero, *Democracy and Intellectual Property: Examining Trajectories of Software Piracy*, 605 ANNALS AM. ACAD. POL. & SOC. SCI. 104,108-09 (2006).

n91 EFF REPORT, *supra* note 68, at 18-19; Piquero & Piquero, *supra* note 90, at 121-22. Professors Nicole Piquero and Alex Piquero noted that

some countries, primarily industrializing, less powerful countries, are being coerced by highly industrialized, more powerful countries into abiding by IP laws ... [F]rom a conflict point of view, rich and powerful countries produce large quantities of IP. As such, they benefit most directly from the creation and implementation of strict laws against the theft of their IP property. These powerful democracies, therefore, have a vested interest in protecting IP...

Id. at 121-22.

n92 EFF REPORT, *supra* note 68, at 19.

n93 *Id.* at 21.

n94 Piquero & Piquero, *supra* note 90, at 108-09.

n95 *Id.*

n96 Goldman & Gladstone, *supra* note 61, at B9; Morea, *supra* note 15, at 222; Gigi B. Sohn, *Don't Mess with Success: Government Technology Mandates and the Marketplace for Online Content*, 5 J. TELECOMM. & HIGH TECH. L. 73, 74-75 (2006). *See* PRIVATKOPIE.NET, *supra* note 74, at 5.

n97 NASHERI, *supra* note 16, at 7; Yang & Hoffstadt, *supra* note 24, at 8. *See* NASHERI, *supra* note 16, at 17-18 (warning against overstating the role of intellectual property violations in the funding of terrorist activities).

n98 Clark, *supra* note 16, at 390-91; NASHERI, *supra* note 16, at 65-66. *See supra* note 17 and accompanying text.

n99 Morea, *supra* note 15, at 228 (citing several legal commentators).

n100 *Id.* at 228-29.

n101 MPAA Camcorder Piracy, *supra* note 34.

n102 Bruce Mohl, *Now Showing: Epic Cost of Cinema Snacks*, BOSTON GLOBE, Mar. 2, 2007, at A1. In 2006, the Regal theater chain indicated that film rental and advertising cost about \$ 907 million to generate ticket revenues of \$ 1.7 billion. However, theater concessions cost about \$ 105 million and brought in \$ 697 million in annual revenues.

n103 *Id.*

n104 *Id.*

n105 *See* MPAA, BEST PRACTICES TO PREVENT FILM THEFT (Mar. 2006), http://www.fightfilmtheft.org/pdfs/BP_US_English.pdf [hereinafter BEST PRACTICES]. *See generally* <http://fightfilmtheft.org> (last visited Dec. 15, 2007) (joint MPAA and NATO Web site aimed at educating public and NATO employees about combating film piracy).

n106 BEST PRACTICES, *supra* note 105, at 5.

n107 *Id.* at 8.

n108 *Id.* at 7.

n109 MPAA, NATO Theater Employee Camcorder Training Guide, <http://www.fightfilmtheft.org/en> (last visited Dec. 14, 2007).

n110 *Id.*

n111 *Id.*

n112 MPAA "Take Action" Reward Program, <http://www.fightfilmtheft.org/en/reward.asp> (last visited Dec. 14, 2007).

n113 BEST PRACTICES, *supra* note 105, at 4. *See supra* note 109 and accompanying text.

n114 *See supra* note 112 and accompanying text.

n115 NATO, Number of U.S. Movie Screens, <http://www.natoonline.org/statisticsscreens.htm> (last visited Dec. 14, 2007).

n116 E-mail from Elizabeth Kaltman, Communications Director, MPAA, to Lucille M. Ponte, Associate Professor, University of Central Florida (Apr. 24, 2007, 06:34:15 EST) (on file with author).

n117 MPAA 2005 FACT SHEET, *supra* note 9; Press Release, U.S. Department of Justice, *supra* note 54.

n118 Press Release, U.S. Department of Justice, *supra* note 54; Press Release, *U.S. Department of Justice, Four Men Sentenced and Another Film Critic Pleads Guilty in Operation Copycat*, Aug. 1, 2006, <http://www.usdoj.gov/criminal/cybercrime/jacobsonplea.htm>.

n119 Sean Captain, *Will Digital Cinema Can Pirates?*, WIRED, Jan. 3, 2006, <http://www.wired.com/science/discoveries/news/2006/01/69922>; Jay Lyman, *Theater Companies Join to Speed Digital Cinema*, TECHNEWSWORLD, Dec. 16, 2005, <http://www.technewsworld.com/story/47882.html>.

n120 Captain, *supra* note 119.

n121 *The Bigscreen Cinema Guide, What is Digital Cinema Projection?*, <http://www.bigscreen.com/about/help.php?id=36> (last visited Apr. 19, 2007).

n122 Captain, *supra* note 119.

n123 *Id.*

n124 *Id.*

n125 Lyman, *supra* note 119.

n126 *Id.*

n127 NATO, *supra* note 115.

n128 Lyman, *supra* note 119.

n129 *Id.*

n130 Kristina Groennings, *Costs and Benefits of the Recording Industry's Litigation Against Individuals*, 20 BERKELEY TECH. L.J. 571, 584-85 (2005); Morea, *supra* note 15, at 233-35. *See* Pew Internet & American Life Project & Comscore, Media Metrix Data Memo, 3 (Jan. 2004), http://www.pewinternet.org/pdfs/PIP_File_Swapping_Memo_0104.pdf [hereinafter Pew Project Memorandum].

n131 Groennings, *supra* note 130, at 584-85; Morea, *supra* note 15, at 233-35; Pew Project Memorandum, *supra* note 130, at 3.

n132 Daly, *supra* note 15, at 287.

n133 *Id.*

n134 MPAA 2005 FACT SHEET, *supra* note 9.

n135 Anne Thompson, *Distributors Hold Firm Against Day-and-Date*, HOLLYWOOD REP., Mar. 17, 2006, http://www.hollywoodreportercom/hr/search/article_displayjsp?vnu_content_id=1002198452.

n136 *Id.*; Gary Gentile, *"Bubble" Hits Theaters, TV DVD on Same Day*, USA TODAY, Jan. 18, 2006, http://www.usatoday.com/tech/news/2006-01-18-bubble-theater-threat_x.htm.

n137 Gentile, *supra* note 136; Thompson, *supra* note 135. John Fithian, president and CEO of NATO, stated that day-and-date releases are "radically misguided" experiments and that the window for movie releases is not changing because "Hollywood knows this model works." Thompson, *supra* note 135.

n138 (Bedford Falls Prods. 2000).

n139 (Jerry Weintraub Prods. 2001).

n140 Gentile, *supra* note 136; Thompson, *supra* note 135.

n141 Gentile, *supra* note 136; Thompson, *supra* note 135.

n142 Thompson, *supra* note 135.

n143 *Id.*

n144 Anders Bylund, IFC, *Comcast Starts Day-and-Date Distribution Service*, ARS TECHNICA, Mar. 1, 2006, <http://arstechnica.com/news.ars/post/20060301-6294.html>.

n145 PRIVATKOPIE.NET, *supra* note 74, at 10; *Posting of Sarah to LawFont.com, What is Region Coding (Part 1)?* (Dec. 12, 2005), <http://www.lawfont.com/2005/12/22/what-is-region-coding/>.

n146 *See* EFF REPLY COMMENT, *supra* note 22, at 4 & 8; EFF TRIENNIAL RULEMAKING, *supra* note 66, at 1.

n147 *See* EFF REPLY COMMENT, *supra* note 22, at 3-4; IP JUSTICE, *supra* note 76, at 4-5; *Posting of Sarah*, *supra* note 145.

n148 IP JUSTICE, *supra* note 76, at 4-5; *Posting of Sarah*, *supra* note 145.

n149 Gardiner, *supra* note 18.

n150 CDT, *supra* note 76, at 12-13 & 17; PRIVATKOPIE.NET, *supra* note 74, at 2 & 6.

n151 DAVID B. CARROLL, PROPOSAL FOR A SPECIFIC EXEMPTION FROM PROHIBITION ON CIRCUMVENTION OF TECHNOLOGICAL MEASURES THAT CONTROL ACCESS TO A CERTAIN CLASS OF COPYRIGHTED WORKS 2. & 3.6 (Dec. 18, 2002), <http://www.copyright.gov/1201/2003/comments/036.pdf>; Cory Doctorow, Speech to Microsoft's Research Group (June 17, 2004), <http://craphound.com/msftdrm.txt>; PRIVATKOPIE.NET, *supra* note 74, at 10; IP JUSTICE, *supra* note 76, at 4-5; Robert Silva, DVD Region Codes, <http://www.hometheater.about.com/cs/dvdlaserdisc/a/aaregioncodesa.htm> (last visited Apr. 10, 2007); *Posting of Sarah*, *supra* note 145.

n152 Silva, *supra* note 151; *Posting of Sarah*, *supra* note 145.

n153 CARROLL, *supra* note 151, at 3.7; Doctorow, *supra* note 151; PRIVATKOPIE.NET, *supra* note 74, at 10; IP JUSTICE, *supra* note 76, at 4-5; *Posting of Sarah*, *supra* note 145. Both the Copyright Office and the movie industry admit that region coding is an access control under the DMCA. Marybeth Peters, Register of Copyrights, Recommendation of the Register of Copyrights in RM 2002-4; Rulemaking on Exemptions from Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, Oct. 27, 2003, at 120, <http://www.copyright.gov/1201/docs/registers-recommendation.pdf>.

n154 CARROLL, *supra* note 151, at 2. & 3.3; Doctorow, *supra* note 151; IP JUSTICE, *supra* note 76, at 4-5; Peters, *supra* note 153, at 121; *Posting of Sarah*, *supra* note 145.

n155 CARROLL, *supra* note 151, at 2. & 3.3; Doctorow, *supra* note 151; IP JUSTICE, *supra* note 76, at 4-5; *Posting of Sarah*, *supra* note 145; Silva, *supra* note 151.

n156 *Blu-Ray Proposes Region Codes for Future HD Titles*, CDRINFO, Dec. 20, 2005, <http://www.cdrinfo.com/Sections/News/Details.aspx?NewsId=15856>.

n157 Doctorow, *supra* note 151; IP JUSTICE, *supra* note 76, at 4; *Posting of Sarah*, *supra* note 145.

n158 CARROLL, *supra* note 151, at 3.6. Mr. Carroll noted that region coding has a negative impact on the "availability of foreign audiovisual works for use in film criticism and analysis." *Id.*

n159 IP JUSTICE, *supra* note 76, at 4.

n160 EFF REPORT, *supra* note 68, at 10; Doctorow, *supra* note 151; *Posting of Sarah to Law-Font.com, What is Region Coding (Part 2)?* (Dec. 31, 2005), <http://www.lawfont.com/2005/12/31/what-is-region-coding-part-2/>.

n161 EFF REPORT, *supra* note 68, at 21-22. The EFF Report indicated that poor nations rely on donations of educational materials and that the extension of DRMs to textbooks, distance education media, music, and literature will prevent access to these materials for many poor nations. *Id.* at 19 & 21-22. Therefore, "region-coding schemes [have] the effect of making the world's poor countries the 'last to the party . . .'" *Id.* In addition, region codes put limits on the First Sale Doctrine, harmful to consumers, IP JUSTICE, *supra* note 76, at 5, and critical for poor nations relying on donated materials. *Id.* at 19 & 22. *See* Erekosima & Koosed, *supra* note 64, at 845 (discussing the split in legal application of first sale doctrine to digital media).

n162 Doctorow, *supra* note 151. Both the Copyright Office and the movie industry admit that region coding is an access control under the DMCA. Peters, *supra* note 153, at 120.

n163 CARROLL, *supra* note 151, at 3.2.3; EFF TRIENNIAL. RULEMAKING, *supra* note 66, at 4. Mr. Carroll indicated that rereleases of older films "aimed at minority tastes" are also being distributed as DVDs rather than region-free VHS tapes. CARROLL, *supra* note 151, at 3.2.3.

n164 CDT, *supra* note 76, at 4-5 & 14-15; Doctorow, *supra* note 151; PRIVATKOPIE.NET, *supra* note 74, at 4 & 10.

n165 See Arnotts Lawyers, *supra* note 68; Gasser & Girsberger, *supra* note 74, at 12; *Posting of Sarah*, *supra* note 160; Silva, *supra* note 151.

n166 GARROLL, *supra* note 151, at 3.3; Silva, *supra* note 151.

n167 Gasser & Girsberger, *supra* note 74, at 12; Silva, *supra* note 151.

n168 CARROLL, *supra* note 151, at 2.; EFF TRIENNIAL RULEMAKING, *supra* note 66, at 4-5; EFF REPLY COMMENT; *supra* note 22, at 3-4. See IP JUSTICE, *supra* note 76, at 4.

n169 EFF REPLY COMMENT, *supra* note 22, at 4; EFF TRIENNIAL. RULEMAKING, *supra* note 66, at 4-5.

n170 *Posting of Sarah*, *supra* note 160.

n171 CARROLL, *supra* note 151, at 3.7.

n172 *Id.* at 2. & 3.3; EFF REPLY COMMENT, *supra* note 22, at 4.

n173 Gardiner, *supra* note 18.

n174 CARROLL, *supra* note 151, at 4. Mr. Carroll explained that the "DVD region coding is technically independent of the act of circumvention of the 'Content Scrambling System' ('CSS') encryption used to prevent access to DVD contents The region code is a single number that is burned onto a DVD This process is entirely unrelated to the eventual decryption of audiovisual content." *Id.* Mr. Carroll also notes that most films run initially in the United States (Region 1) so it seems necessary to limit Region 1 audiences from viewing films from other regions. *Id.* at 3.7.

n175 CDT, *supra* note 76, at 15; *Posting of Sarah*, *supra* note 145.

n176 CARROLL, *supra* note 151, at 3.7; *Posting of Sarah*, *supra* note 145; Silva, *supra* note 151.

n177 IP JUSTICE, *supra* note 76, at 5; *Posting of Sarah*, *supra* note 145; Silva, *supra* note 151.

n178 *Posting of Sarah*, *supra* note 160.

n179 IP JUSTICE, *supra* note 76, at 5; *Posting of Sarah*, *supra* note 145.

n180 See IP JUSTICE, *supra* note 76, at 5.

n181 CDT, *supra* note 76, at 5; EFF TRIENNIAL RULEMAKING, *supra* note 66, at 5; IP JUSTICE, *supra* note 76, at 9. The IP Justice commentary indicated that

. . . copyright owners are using the DMCA to eliminate consumers' control over their own experience of audio-visual works. Without the ability to circumvent use controls, individuals are forced to experience motion pictures in a manner controlled by the movie industry. For example, parents who want to fast-forward through age-inappropriate movie-previews are prevented from that legitimate activity by CSS access controls and consumers are forced to watch advertisements, since bypassing the technology that prevents fast-forwarding during those ads would be a DMCA violation.

Id. at 9.

n182 IP JUSTICE, *supra* note 76, at 9. See *supra* note 181 and accompanying text.

n183 IP JUSTICE, *supra* note 76, at 9. See *supra* note 181 and accompanying text.

n184 Peters, *supra* note 153, at 113. While recognizing that a significant reverse engineering effort would be required, the report noted that,

[w]hile the record in this rulemaking is not as clear as the Register would like it to be, the Register concludes that technological modification of a DVD player to ignore or bypass navigational blocks such as fast forwarding can be accomplished without circumventing CSS. Since this non-infringing use can be accommodated without an exemption and is therefore not adversely affected by the prohibition, the Register finds that an exemption is unwarranted.

Id. See also EFF TRIENNIAL RULEMAKING, *supra* note 66, at 5 (criticizing the refusal to grant DMCA exemption).

n185 CARROLL, *supra* note 151, at 3.6; CDT, *supra* note 76, at 5. See PRIVATKOPIE.NET, *supra* note 74, at 2, 4, 10 & 13. But see *infra* note 67 and accompanying text (discussing the narrow DMCA exemption for media studies professors under certain circumstances).

n186 Universal City Studios, Inc. v. Reimerdes, 111 F. Supp. 2d 294, 322 (S.D.N.Y. 2000); Universal City Studios, Inc. v. Corley, 273 F.3d 429, 458-59 (2d Cir. 2001); 321 Studios v. MGM Studios, Inc., 307 F. Supp. 2d 1085, 1097 (N.D. Cal. 2004).

n187 Reimerdes, 111 F. Supp. 2d at 322 (footnotes omitted).

n188 Gasser & Girsberger, *supra* note 74, at 23; Goodman, *supra* note 74; Benjamin May, *Private Copies: One (Triple) Test to Rule Them All*, KNOW IP NEWSLETTER, May 13, 2006, <http://www.economag.com/indexEN.php?blocid=21&page=1>; NASHERI, *supra* note 16, at 22; PRIVATKOPIE.NET, *supra* note 74, at 7.

n189 Goodman, *supra* note 74; May, *supra* note 188; PRIVATKOPIE.NET, *supra* note 74, at 7.

n190 Gasser & Girsberger, *supra* note 74, at 4-5.

n191 May, *supra* note 188.

n192 Gasser & Girsberger, *supra* note 74, at 23-24.

n193 *See* CDT, *supra* note 76, at 4-5 & 12; PRIVATKOPIE.NET, *supra* note 74, at 7-8 & 10.

n194 CDT, *supra* note 76, at 21-22; Haber et al., *supra* note 22, at 231-33; PRIVATKOPIE.NET, *supra* note 74, at 10. *See generally* Morea, *supra* note 15, at 239-45 (discusses the use of noncommercial levies or government-run compensation programs to fund artist royalties).

n195 CDT, *supra* note 76, at 21-22; Gardiner, *supra* note 18; NASHERI, *supra* note 16, at 22.

n196 NASHERI, *supra* note 16, at 22.

n197 *Id.* Although file sharing is subject to civil and criminal penalties in the United States, the Audio Home Recording Act of 1992 called for importers and manufacturers of digital audio recording devices and media to pay royalties into funds for musical works and sound recordings. 17 U.S.C. §§1003-1007 (2000). The Act does not cover video recordings. *Id.* at § 1001.

n198 COPYSWEDE, PRIVATE COPYING LEVY IN SWEDEN 2007 5-8 (2007), <http://www.copyswede.se/files/briySV4Pv.pdf>; FINNISH COPYRIGHT ACT 8.6.1984 422/84 (2007). Currently, nineteen EU nations also provide various schemes for private copy levies to support royalty funds with only Great Britain, Ireland, and Luxembourg not having such laws. *See* The Basis for Private Copying Levy, <http://www.hyvitysmaksu.fi/Tcosto/hymysivut.nsf/wpages/indexen.htm/> (last visited Apr. 9, 2008) (official Web site on Finnish private copying levy).

n199 CDT, *supra* note 76, at 21-22.

n200 *Id.* at 6; Gardiner, *supra* note 18.

n201 CDT, *supra* note 76, at 6.

n202 Eric Bangeman, *MPAA Sues Over DVD-to-iPod Service*, ARS TECHNICA, Nov. 17, 2006, <http://arstechnica.com/news.ars/post/20061117-8241.html>.

n203 MPAA, 2007 THEATRICAL MARKET STATISTICS, 9, <http://www.mpa.org/2007-US-Theatrical-Market-Statistics-Report.pdf> (last visited Apr. 8, 2008).

n204 CDT, *supra* note 76, at 15-17; Doctorow, *supra* note 151; Grassmuck, *supra* note 74, at 8-10; IP JUSTICE, *supra* note 76, at 4-6.

n205 Bangeman, *supra* note 202; CDT, *supra* note 76, at 4-5 & 15. *See* IP JUSTICE, *supra* note 76, at 4-6. *See infra* notes 206 & 218 and accompanying text.

n206 Bangeman, *supra* note 202.

n207 Doctorow, *supra* note 151.

n208 Bangeman, *supra* note 202; IP JUSTICE, *supra* note 76, at 5-6. *See* PRIVATKOPIE.NET, *supra* note 74, at 9.

n209 Doctorow, *supra* note 151.

n210 Gardiner, *supra* note 18.

n211 *Id.*

n212 CDT, *supra* note 76, at 16.

n213 PRIVATKOPIE.NET, *supra* note 74, at 9-10. Dr. Grassmuck warned against the antitrust implications of dominant players, such as Microsoft's and Time Warner's joint efforts, using their extensive "portfolio to put . . . rivals in the DRM solutions market at a competitive disadvantage. It could slow down the development of open interoperability standards, and allow the DRM market to tip towards the current leading provider, Microsoft DRM is not a matter of trust but first and foremost one of antitrust." *Id.* at 10.

n214 Bangeman, *supra* note 202.

n215 Bangeman, *supra* note 202; CDT, *supra* note 76, at 16.

n216 Bangeman, *supra* note 202; CDT, *supra* note 76, at 16.

n217 PRIVATKOPIE.NET, *supra* note 74, at 9-10. *See also* Nick Veitch, *Music of Politics*, LINUX FORMAT, Apr. 2007, at 5; About Xiph, <http://xiph.org/about/> (last visited Dec. 15, 2007) (arguing for nonproprietary device platforms for music for benefits to consumers).

45 Am. Bus. L.J. 331, *

n218 Bangeman, *supra* note 202.